

#### ABSTRACT

A process is described for the delivery of a therapeutic polynucleotide to a tissue suffering from or potentially suffering from ischemia. The process comprises designing a polynucleotide for transfection. Then the polynucleotide is inserted into a mammalian vessel such as an artery or a vein. Prior to insertion, subsequent to insertion, or concurrent with insertion the volume of the tissue is increased such that the genetic material is delivered to the parenchymal cell.